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Subj: Product Information Release #91.06.03

June 1991

There are several new products in this release, some of which are still in development. They are listed here, mainly to let you know that there ARE products still available for the Atari Classic computers.

Starting with this release, a simplified pricing structure has been implemented. All prices are shown in US Dollars, for end user purchases. See company policy at the end of this file for more information on the ordering procedures.

PLEASE NOTE: Include shipping as outlined in the company policy section at the end of this release.

We would appreciate your input on some of the following potential future products. If you have any suggestions, comments, or criticisms please write! If you have an ideal for a potential product, either software, or hardware, we would like to hear from you!

\* MIDICART: A MIDI interface and software all on one plug in cartridge for the Atari 8-bit systems. If you are into MIDI (control of musical instruments by computers) and want to interface your classic computer, this is will be the ultimate solution.

\* AGDAGON: A multi-computer/multi-player (up to 16 systems) game which puts you against the crowd in a first-person perspective maze. An inexpensive interface (GameLink-II) makes it possible. GameLink-II uses a modified SIO cable for the link, and will allow the slave computers to boot from the master system (only one system needs a disk drive or game cartridge). With only one cartridge for each game loop costs are kept WAY down! Other games are planned if AGDAGON is accepted (such as a 3D multi-player Star Raiders type game!). Estimate the cartridge to be \$20 or less!

\* 130XEC: An Atari 130XE computer on a PC card! This will allow you to have all the fun and utility of an 8-bit system hidden in your PC. Using a special MSDOS interface, your 8-bit applications can use the PC video and other peripherals, in addition to normal 8-bit devices. It may even be possible to be run an 8-bit process as a task using Windows 3.0! The 'XEC' will be designed with a high degree of compatibility with the original XL/XE line. Connections will be provided for two joystick ports, cartridge port, audio/video monitor output, SIO connector, and of course the normal 80x88 PC card edge.

\* 1600XLE: The Ultimate 8-bit machine... with a blazing 'no wait state' 8MHz 65C816 processor on a 'baby AT' sized motherboard, nothing will come close to the performance of this machine. A custom interface chip will allow PC interface cards to be used on the 8-slot backplane. This motherboard will fit into most PC style cases, and will run Atari 8-bit applications which make no illegal entry points into the OS, or use direct screen access. This monster would be for the power users only, not the casual game player! Using normal PC peripherals would keep costs down, and allow maximum expandability.

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## TransKey: Version 2.4

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TransKey is an adapter board for 400/800/XL/XE computers which will allow you to use an IBM type keyboard in those systems. There are several variations depending on connector options.

TransKey solder-in version 2.4 .....	\$47.00
TransKey plug-in version 2.4 .....	\$57.00
Zero-Power SRAM option (adder to above) .....	\$12.95

Upgrade ROM 2.4 from any prior .....	\$5.00
6116 SRAM (if your board lacks one) .....	\$5.00

Please Specify whether you want the keyboard connector to be of the inline or chassis mount type. If not specified the inline type will be assumed. If you have an XE type computer, or an XL which has its PoKey IC soldered in, you will probably want the solder in version, to eliminate the need to remove PoKey and add an IC socket.

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## Turbo-816: Version 1.5 (Turbo-OS Version 1.311)

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The Turbo-816x is a 16-bit CPU upgrade for the Atari XL/XE computer. This upgrade will add 16-bit working registers, a 24-bit address bus, and numerous new addressing modes and instructions. All this new power is available to new programs written to take advantage of the new CPU, while maximum compatibility with current hardware, and software is maintained.

Included with the Turbo-816x is a new operating system PROM, which can be installed to replace your current Atari OS, or using a switch circuit, used in addition to the Atari OS. This OS chip, called the Turbo-OS provides system calls to take advantage of the new processor addressing.

The Turbo-816x is clocked at the same speed as the original Atari CPU, so that current games and such will run at approximately the same speed as with the stock CPU. Since the OS, Interrupts, and Floating Point package are more efficient than the stock OS, existing applications will realize a speed increase of 5-10% in addition to an increase that is proportional to their OS system call usage.

The Turbo-816x comes packaged with the following:

- Turbo-816 adapter board for the XL/XE computer systems.
- Turbo-OS Operating System 28-pin PROM (2 for 1200XL).
- CPU ribbon cable with connectors.
- Installation guide.

Included also are the following files on 5SSD disk:

- Turbo-816 expansion bus pinout.
- Turbo-816 MAC/65 compatible macros for 65816 instructions.
- Turbo-OS MAC/65 compatible include file.
- Turbo-OS to Atari 400/800/XL/XE OS cross-ref guide.
- Turbo-OS function call application information.
- Turbo-OS memory map guide, menu features, and several example files.

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Turbo-816 for the XL/XE computers. Includes adapter board, connection cable, Turbo-OS PROM, installation and usage guide, programming information diskettes. Please indicate which system (600xl, 800xl, 130xe, or 65xe). To make room for added features the international character set, and cassette device handler have been removed from all versions of the Turbo-OS. Installing the Dual-Prom option will allow use of the Atari OS in applications where those features are desired.

T816X-K      Turbo-816 Kit      Cost \$100.00

Same as XL/XE kit, except includes two PROMs for the 1200XL. Note: 1200XL function keys and lights are not supported.

T816X12-K    Turbo-816 for 1200XL      Cost \$120.00

Includes installation of a Turbo-816 into an Atari 8-bit computer. Units will be tested before the installation, and will not be modified if the unit does not pass all tests. Price includes any needed sockets, wire and toggle switch. Installations usually have a three to four day turn-around except 1200XL I12D1, which may take longer. Please provide name, address, phone number AND sufficient return postage.

T816IND      Installation w/Dual Prom Option      Cost \$45.00

T816I12D1    Installation into 1200XL (w/800XL Atari OS)      Cost \$70.00

T816I12D2    Installation into 1200XL (w/1200XL Atari OS)      Cost \$65.00

Upgrade/replacement Turbo-OS PROM of the current version for the 600XL, 800XL, 130XE, 65XE or single PROM 1200XL. Use 'UG' suffix for upgrading T816 and OS to current version. You must return your T816 board for board upgrades.

TOS08      Turbo-OS PROM      \$12.00    Upgrade OS to 1.311

TOS08UG      Turbo-OS PROM      \$22.00    Upgrade OS, and T816 board to 1.5

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#### PROGRAMMER'S PAL: Version 1.0

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This program allows BASIC programmers to have reference data close by while they are programming. This version is designed for AtariDOS 2.x and compatibles. Among the functions included are:

Muliple CROSS-REFERENCE, BASIC CURRENT STATUS, CALCULATOR, DISK SECTOR LOADER, MEMORY PEEKER, and OPERATING SYSTEM EQUATE.

PRG-PAL1    Programmer's PAL      Cost \$20.00

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#### Turbo-SRAM/PROM: Version 1.01

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These boards will hold two memory devices. Supported types are 62256 (32k SRAM), 66204 (128k SRAM), 27256 (32k EPROM), 27512 (64k EPROM), and 27010 (128k EPROM). Information to configure the card for other devices is supplied. Both devices should be the same size, although you may have one SRAM device, and one PROM device.

Turbo-SRAM boards include a shunt selection guide, connection cable, protection sheath, and memory as specified by the part number suffix. The cable included will support one memory card. Turbo-SRAM is available without any installed RAM, 64k or SRAM, or 128k of SRAM.

TSRAM-0      0k Turbo-SRAM      Cost \$35.00

TSRAM-64      64k Turbo-SRAM      Cost \$50.00

TSRAM-128    128k Turbo-SRAM      Cost \$70.00

TSRAM-256    256k Turbo-SRAM      Cost \$99.00

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Turbo-Calc: Version 1.01

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Turbo-Calc is a cartridge based spreadsheet program for the Atari 800/XL/XE/XEGS/T816 systems. It will work with, or without a Turbo-816 installed. The Turbo-816 is required to allow access to expanded RAM. Turbo-Calc supports up to 104 columns and 99 rows of information.

Source code for Turbo-Calc is also available separately, Please specify either MS-DOS, or Atari DOS disk format, and whether you want 5.25" or 3.5" floppies. The Turbo-View environment is not included in this source code package (see Turbo-View).

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T816-S16	Turbo-Calc	Cost \$30.00
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Turbo-View: Version 1.02

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Turbo-View is a graphical operating environment, which uses the graphics 0 (antic 2) mode. The source code supplied contains the windowing routines, and execution control algorithms. Supplied also is the Turbo-View module of the Turbo-Calc program, to show an actual example of its use. Purchase of source allows use in non-commercial programs.

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T816-S16S	Turbo-Calc Source Code Listing (w/o Turbo-View)	Cost \$20.00
T816-V16S	Turbo-View source code (non-commercial use)	Cost \$30.00

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Turbo-A8: Version 1.2

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This is an assembler which will run on any 8-bit Atari computer, and generate either 6502, or 65816 object code. There is also an extended version for systems which have XE banked type upgrades. This was written by Jeff Williams of Canada, and coined as the Alf Assembler.

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T816-A8	Alf-Assembler for 6502/65816	Cost \$20.00
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TC8	*** availability to be announced ***
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This is the high level language system you have been waiting for. The C language is THE most popular language on large systems, and now you can also develop complex programs using C, without paying the severe code size, and speed penalties that 'other' high level languages for the Atari 8-bit have demanded.

TC8 will be distributed on a bank selected cartridge, to allow the features of the ANSI C language. Not a small subset, but the real thing. A full function library will also included on disk, to allow users to make changes to system functions. Library source will be offered separately.

Currently the runtime libraries are 90% finished, and the cross- compiler version is done except structure and union support. If you are interested in this product, please send me a post card with your thoughts!

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TC8DC	Turbo-C8 Developer Cartridge	** ESTIMATED ** Cost \$55.00
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\*\*\* Specifications and prices listed are projected and are subject to change. Final specifications will be released when the product is available. This is projected to be available 3Q '91.

TBC-4000

\*\*\* availability to be announced \*\*\*

The TBC-4000 is a bank selected cartridge for all Atari 8-bit computer systems. Many users have requested the availability of an easy to use banked cartridge, and here it is!

The TBC-4000 has a socket for one JEDEC memory device. This can be any EPROM from 2764 (8K byte) through 274000 (512K byte). There is an option socket for an 8-pin EEPROM (Electrically Erasable EPROM). This can be used to store user programmed defaults. There are several of these EEPROMS available, from 256 bits, through 4K bits.

To simplify programming, the TBC-4000 forces bank-0 into the upper half of the cartridge (4K bytes) at all times. This removes the hassle of recalculating the cartridge checksum on the XL/XE's each time the bank is changed. Also, bank-0 will always be the bank entered through the OS system reset/init, so you do not have to duplicate that code in each bank. Since this bank is always accessible, your bank switching and other often used subroutines can be located here for optimum performance. The lower 4K of the cartridge will power up randomly, so your bank-0 init code will have to initialize the select register.

The price below does NOT include any EPROM or EEPROM memory device, and is for low volume (under 25) purchases. This estimated cost is probably a bit on the high side and will be adjusted when I have actual boards.

TBC-4000 Banked Program Cartridge \*\* ESTIMATED COST UNDER \$17.00

\*\*\* Specifications and prices listed are projected and are subject to change. Final specifications will be released when the product is available. This is projected to be available 3Q '91.

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#### MSDOS Cross-Development Products for the Atari 8-bit Systems:

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The following products are available for those programmers which have access to a IBM/PC or compatible computer, and would like to be able to develop code for their Atari 8-bit (and Turbo-816) systems.

These programs require a minimum of 256K of available RAM, and either MSDOS or PCDOS, version 3.0 or higher. They will all work on 8088 through 80386 based machines. A hard drive is recommended.

The X816 assembler will produce code in either binary image (for EPROMS) or Atari binary load format. Extended Turbo-816 object format is also supported for images which are to be loaded above the normal 6502 addressing range. Version of 1.17 is current.

X816 cross-assembler for 6502/65816 Cost \$20.00

D816 will accept either of the two binary forms for input, in addition it will accept the link file produced by X816 (or you can construct your own with a text editor) to add symbols to the disassembly. Version 1.04 is current.

D816 cross-disassembler for 6502/65816 Cost \$15.00

The TT utility will convert Ascii, and Atascii files from one format to another with several options. Version 1.04 is current.

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TT      text-translator      Cost $10.00
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H2B and B2H are used to transfer binary images in an ascii form, and convert them back to binary images. Many EPROM programmers use one of the supported hex formats. Current version is 1.03 of each.

B2H	binary to intel/motorola hex and...	
H2B	intel/mot hex to binary translators	Cost \$10.00

A disk with all of the above (most recent versions of each) is available for \$32.00 on 5.25" MSDOS diskettes. If you would prefer a 3.5" diskette, please indicate such, and enclose an extra \$2.00 per diskette.

DataQueue POLICY:

We accept personal checks, Money Orders, or cashier's checks made out to DataQue Software. Personal checks must clear before shipment is made. If you would prefer a COD delivery, include \$5.00 for special handling. Shipments are shipped via parcel post unless special handling is noted. Foreign orders must be a money order drawn on a US bank, in US funds, and require an additional \$5.00 added to the total amount. Any taxes are the responsibility of the purchaser. All orders should include \$4.00 to cover shipping and handling, except for installations, which should include return postage. All prices are in US dollars and are subject to change without notice.

DataQue warrants its products for 1 year on parts (hardware and media), and 90 days on labor. Shipping to DataQue Software is the responsibility of the customer, and return postage is paid by DataQue. Please include a complete description of the problem, and a phone number in case we need to contact you.